Bibliography

Javier Rodriguez

3/3/2021

This is a citation of paper: “Javier Rodríguez-Pérez, J. Bosco Imbert, Javier Peralta. Fine-scale environmental and density-dependent factors explain the spatial aggregation of tree recruits after thinning. Ecosphere.”

# Introduction

(McIntire and Fajardo 2009)

(Ma et al. 2010, Primicia et al. 2013, 2016, García Sancet 2017)

(Wolf 2005)

(Frelich 2002)

(Thébault and Fontaine 2010, Walther 2010)

(Tilman and Kareiva 2018)

(Denslow 1995, Dolanc et al. 2003, Yeo and Lee 2006)

(Gratzer et al. 2004)

(Oliver et al. 1996)

## \*

(Battles et al. 2008, Ganey and Vojta 2011)

(Barbier et al. 2008)

(Kenkel 1988, Moeur 1997, Plotkin et al. 2002)

(Perry et al. 2008, Shen et al. 2013, Pescador et al. 2020)

## \*

(Wiegand and Moloney 2014)

# Material and methods

## Maps of environmental variables

(R Core Team 2020)

## Generalities of the point-pattern analysis

(Wiegand and A. Moloney 2004, Law et al. 2009)

(Diggle et al. 2003, Illian et al. 2008)

(Wiegand and A. Moloney 2004, Jacquemyn et al. 2007)

[(Wiegand and A. Moloney 2004)

## Summary statistics of spatial-point patterns

(Baddeley et al. 2015)

(Illian et al. 2008)

(Van Lieshout and Baddeley 1996)

(R Core Team 2020)

(Baddeley et al. 2015)

(Law et al. 2009)

(Illian et al. 2008)

## Analysis 1: Description of aggregation patterns of trees and recruits

(Diggle et al. 2003, Illian et al. 2008)

[(Diggle et al. 2003)

(Baddeley et al. 2015)

(De La Cruz et al. 2008)

(Wiegand and Moloney 2014)

## Analysis 2: Factors explaining the aggregation of recruits

(Baddeley et al. 2015)

(Berman 1986)

(Wiegand and Moloney 2014)

# Discussion

## Aggregation and association patterns of trees and recruits

(Wolf 2005, Franklin 2010)

(Schupp 1995, Wright 2002)

(Dolanc et al. 2003, Yeo and Lee 2006)

(Wright et al. 2014)

(Andivia et al. 2018)

## Factors explaining the aggregation of recruits

(Wiegand and Moloney 2014)

(Götzenberger et al. 2012)

(Perry et al. 2008, Shen et al. 2013, Pescador et al. 2020)

(Kitajima and Fenner 2000)

(Solga et al. 2005, Ackermann et al. 2012)

(Stuiver et al. 2014)

(Callaway and Walker 1997)

(Wiegand et al. 2009, Espinosa et al. 2016)

(Hampe et al. 2008, Batllori et al. 2009)

# Bibliography

Ackermann, K., O. Zackrisson, J. Rousk, D. L. Jones, and T. H. DeLuca. 2012. N 2 fixation in feather mosses is a sensitive indicator of n deposition in boreal forests. Ecosystems 15:986–998.

Andivia, E., J. Madrigal-González, P. Villar-Salvador, and M. A. Zavala. 2018. Do adult trees increase conspecific juvenile resilience to recurrent droughts? Implications for forest regeneration. Ecosphere 9:e02282.

Baddeley, A., E. Rubak, and R. Turner. 2015. Spatial point patterns: Methodology and applications with r. CRC Press.

Barbier, S., F. Gosselin, and P. Balandier. 2008. Influence of tree species on understory vegetation diversity and mechanisms involved—a critical review for temperate and boreal forests. Forest ecology and management 254:1–15.

Batllori, E., J. J. Camarero, J. M. Ninot, and E. Gutiérrez. 2009. Seedling recruitment, survival and facilitation in alpine pinus uncinata tree line ecotones. Implications and potential responses to climate warming. Global Ecology and Biogeography 18:460–472.

Battles, J. J., T. Robards, A. Das, K. Waring, J. K. Gilless, G. Biging, and F. Schurr. 2008. Climate change impacts on forest growth and tree mortality: A data-driven modeling study in the mixed-conifer forest of the sierra nevada, california. Climatic change 87:193–213.

Berman, M. 1986. Testing for spatial association between a point process and another stochastic process. Journal of the Royal Statistical Society: Series C (Applied Statistics) 35:54–62.

Callaway, R. M., and L. R. Walker. 1997. Competition and facilitation: A synthetic approach to interactions in plant communities. Ecology 78:1958–1965.

De La Cruz, M., R. L. Romao, A. Escudero, and F. T. Maestre. 2008. Where do seedlings go? A spatio-temporal analysis of seedling mortality in a semi-arid gypsophyte. Ecography 31:720–730.

Denslow, J. S. 1995. Disturbance and diversity in tropical rain forests: The density effect. Ecological Applications 5:962–968.

Diggle, P. J., P. J. Ribeiro, and O. F. Christensen. 2003. An introduction to model-based geostatistics. Pages 43–86 Spatial statistics and computational methods. Springer.

Dolanc, C. R., D. L. Gorchov, and F. Cornejo. 2003. The effects of silvicultural thinning on trees regenerating in strip clear-cuts in the peruvian amazon. Forest Ecology and Management 182:103–116.

Espinosa, C. I., M. de la Cruz, A. Jara-Guerrero, E. Gusmán, and A. Escudero. 2016. The effects of individual tree species on species diversity in a tropical dry forest change throughout ontogeny. Ecography 39:329–337.

Franklin, J. 2010. Spatial point pattern analysis of plants. Pages 113–123 Perspectives on spatial data analysis. Springer.

Frelich, L. E. 2002. Forest dynamics and disturbance regimes: Studies from temperate evergreen-deciduous forests. Cambridge University Press.

Ganey, J. L., and S. C. Vojta. 2011. Tree mortality in drought-stressed mixed-conifer and ponderosa pine forests, arizona, USA. Forest Ecology and Management 261:162–168.

García Sancet, M. A. 2017. Influencia de los parámetros de dosel y lumínicos sobre la regeneración de pinus sylvestris l. En un bosque mixto con tres intensidades de clara. MsC Thesis. Public University of Navarra, Spain.

Götzenberger, L., F. de Bello, K. A. Bråthen, J. Davison, A. Dubuis, A. Guisan, J. Lepš, R. Lindborg, M. Moora, M. Pärtel, and others. 2012. Ecological assembly rules in plant communities—approaches, patterns and prospects. Biological reviews 87:111–127.

Gratzer, G., C. Canham, U. Dieckmann, A. Fischer, Y. Iwasa, R. Law, M. J. Lexer, H. Sandmann, T. A. Spies, B. E. Splechtna, and others. 2004. Spatio-temporal development of forests–current trends in field methods and models. Oikos 107:3–15.

Hampe, A., J. L. García-Castaño, E. W. Schupp, and P. Jordano. 2008. Spatio-temporal dynamics and local hotspots of initial recruitment in vertebrate-dispersed trees. Journal of Ecology 96:668–678.

Illian, J., A. Penttinen, H. Stoyan, and D. Stoyan. 2008. Statistical analysis and modelling of spatial point patterns. John Wiley & Sons.

Jacquemyn, H., R. Brys, K. Vandepitte, O. Honnay, I. Roldán-Ruiz, and T. Wiegand. 2007. A spatially explicit analysis of seedling recruitment in the terrestrial orchid orchis purpurea. New Phytologist 176:448–459.

Kenkel, N. 1988. Pattern of self-thinning in jack pine: Testing the random mortality hypothesis. Ecology 69:1017–1024.

Kitajima, K., and M. Fenner. 2000. Ecology of seedling regeneration. Pages 331–359 *in* M. Fenner, editor. Seeds: The ecology of regeneration in plant communities. CABI Publishing, Wallingford, UK.

Law, R., J. Illian, D. F. Burslem, G. Gratzer, C. Gunatilleke, and I. Gunatilleke. 2009. Ecological information from spatial patterns of plants: Insights from point process theory. Journal of Ecology 97:616–628.

Ma, S., A. Concilio, B. Oakley, M. North, and J. Chen. 2010. Spatial variability in microclimate in a mixed-conifer forest before and after thinning and burning treatments. Forest Ecology and Management 259:904–915.

McIntire, E. J., and A. Fajardo. 2009. Beyond description: The active and effective way to infer processes from spatial patterns. Ecology 90:46–56.

Moeur, M. 1997. Spatial models of competition and gap dynamics in old-growth tsuga heterophylla/thuja plicata forests. Forest Ecology and Management 94:175–186.

Oliver, C. D., B. C. Larson, and others. 1996. Forest stand dynamics: Updated edition. John Wiley; sons.

Perry, G., N. Enright, B. Miller, and B. Lamont. 2008. Spatial patterns in species-rich sclerophyll shrublands of southwestern australia. Journal of Vegetation Science 19:705–716.

Perry, G., N. Enright, B. Miller, and B. Lamont. 2008. Spatial patterns in species-rich sclerophyll shrublands of southwestern australia. Journal of Vegetation Science 19:705–716.

Pescador, D. S., M. de la Cruz, J. Chacón-Labella, J. Pavón-Garcı́a, and A. Escudero. 2020. Tales from the underground: Soil heterogeneity and not only above-ground plant interactions explain fine-scale species patterns in a mediterranean dwarf-shrubland. Journal of Vegetation Science 31:497–508.

Plotkin, J. B., J. Chave, and P. S. Ashton. 2002. Cluster analysis of spatial patterns in malaysian tree species. The American Naturalist 160:629–644.

Primicia, I., R. Artazcoz, J. B. Imbert, F. Puertas, C. Traver, and F. J. Castillo. 2016. Influence of thinning intensity and canopy type on scots pine stand and growth dynamics in a mixed managed forest. Forest Systems 25:1.

Primicia, I., J. J. Camarero, J. B. Imbert, and F. J. Castillo. 2013. Effects of thinning and canopy type on growth dynamics of pinus sylvestris: Inter-annual variations and intra-annual interactions with microclimate. European Journal of Forest Research 132:121–135.

R Core Team. 2020. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria.

Schupp, E. W. 1995. Seed-seedling conflicts, habitat choice, and patterns of plant recruitment. American Journal of Botany 82:399–409.

Shen, G., F. He, R. Waagepetersen, I.-F. Sun, Z. Hao, Z.-S. Chen, and M. Yu. 2013. Quantifying effects of habitat heterogeneity and other clustering processes on spatial distributions of tree species. Ecology 94:2436–2443.

Shen, G., F. He, R. Waagepetersen, I.-F. Sun, Z. Hao, Z.-S. Chen, and M. Yu. 2013. Quantifying effects of habitat heterogeneity and other clustering processes on spatial distributions of tree species. Ecology 94:2436–2443.

Solga, A., J. Burkhardt, H. Zechmeister, and J.-P. Frahm. 2005. Nitrogen content, 15N natural abundance and biomass of the two pleurocarpous mosses pleurozium schreberi (brid.) Mitt. And scleropodium purum (hedw.) Limpr. In relation to atmospheric nitrogen deposition. Environmental pollution 134:465—473.

Stuiver, B. M., D. A. Wardle, M. J. Gundale, and M.-C. Nilsson. 2014. The impact of moss species and biomass on the growth of pinus sylvestris tree seedlings at different precipitation frequencies. Forests 5:1931–1951.

Thébault, E., and C. Fontaine. 2010. Stability of ecological communities and the architecture of mutualistic and trophic networks. Science 329:853–856.

Tilman, D., and P. Kareiva. 2018. Spatial ecology: The role of space in population dynamics and interspecific interactions (MPB-30). Princeton University Press.

Van Lieshout, M., and A. Baddeley. 1996. A nonparametric measure of spatial interaction in point patterns. Statistica Neerlandica 50:344–361.

Walther, G.-R. 2010. Community and ecosystem responses to recent climate change. Philosophical Transactions of the Royal Society B: Biological Sciences 365:2019–2024.

Wiegand, T., and K. A. Moloney. 2004. Rings, circles, and null-models for point pattern analysis in ecology. Oikos 104:209–229.

Wiegand, T., I. Martínez, A. Huth, A. E. P. D. Taylor, and E. D. L. DeAngelis. 2009. Recruitment in tropical tree species: Revealing complex spatial patterns. The American Naturalist 174:E106–E140.

Wiegand, T., and K. Moloney. 2014. Handbook of spatial point-pattern analysis in ecology CRC press. Boca Raton, FL.

Wolf, A. 2005. Fifty year record of change in tree spatial patterns within a mixed deciduous forest. Forest Ecology and management 215:212–223.

Wright, A., S. A. Schnitzer, and P. B. Reich. 2014. Living close to your neighbors: The importance of both competition and facilitation in plant communities. Ecology 95:2213–2223.

Wright, J. S. 2002. Plant diversity in tropical forests: A review of mechanisms of species coexistence. Oecologia 130:1–14.

Yeo, U. S., and D. K. Lee. 2006. Early regeneration of fraxinus rhynchophylla in the understorey of larix kaempferi stands in response to thinning. Forestry 79:167–176.